

# I CLAIM

1. An air filter shaping mold comprising:

An upper mold base having its lower side formed with an upper cavity of a preset depth, said upper cavity  
5 formed with a plurality of separating plates equidistantly protruding downward from the bottom, between every two said separating plates formed a groove, an annular groove of a preset width formed between all said separating plates and the  
10 circumferential edge of said upper cavity, said annular groove having plural through pouring holes bored at preset locations and communicating to the upper surface of said upper mold base, said upper mold base having its upper surface bored with plural pouring passages  
15 communicating with one another and with said pouring holes, said pouring passages guiding raw material to get in and fill up said annular groove through said pouring holes, said upper mold base further having four combining holes respectively bored at four corners of  
20 the bottom:

A lower mold base to be combined with the bottom side of said upper mold base, said lower mold base having its topside bored with a lower cavity, said lower cavity provided with a plurality of separating plates  
25 equidistantly protruding upward from the bottom, between every two said separating plates formed a groove, said separating plates of said upper and said

lower mold base interposing each other and positioned in said upper and said lower cavity when said upper and said lower mold base are combined together, an annular groove of a preset width formed between all said separating plates and the circumferential edge of said lower cavity, said annular groove of said lower cavity matching with said annular groove of said upper cavity, said lower mold base further having four combining studs respectively fixed at four corners of the upper surface, said four combining studs of said lower mold base respectively inserted in said four combining holes of said upper mold base: and

A filter material formed in advance with continuous curves placed on said separating plates of said lower cavity, raw material poured in said pouring passages after said upper and said lower mold base are combined together, said raw material filling up said annular grooves of said upper and lower cavity, said raw material also covering and bonding part of the circumferential edge of said filter material to form the outer frame of an air filter, thus integrally forming an air filter of a great strength.

2. The air filter shaping mold as claimed in Claim 1, wherein said separating plates of said upper and said lower cavity and said grooves formed between said separating plates are respectively triangle-shaped.

3. The air filter shaping mold as claimed in Claim

1, wherein said raw material to be poured in said mold is rubber.

4. The air filter shaping mold as claimed in Claim 1, wherein said filter material is composed of a filter fabric and a metallic gauze, and said filter fabric is a non-woven fabric or cotton cloth having function of air filtering, said metallic gauze covering and clamping the surface of said filter fabric to strengthen the structure of said filter material.

5. The air filter shaping mold as claimed in Claim 1, wherein said filter material is a metallic gauze made of stainless steel so it has a strengthened structure and can be cleaned easily and employed repeatedly.

6. The air filter shaping mold as claimed in Claim 1, wherein said separating plates of said upper and said lower cavity are respectively shaped as a pillar having its end formed with an arc-shaped surface, and said grooves formed between said separating plates are respectively pillar-shaped.

7. The air filter shaping mold as claimed in Claim 1, wherein said annular groove of said lower cavity has its upper side formed with an arc-shaped surface, so that the frame of an air filter, after formed in said shaping mold, has its upper edge formed with a current guiding surface of a preset radian.